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ABSTRACT

A study examined the effects of media advertising on the elderly to determine whether they use the media to help combat social disengagement, whether they perceived the elderly as positively portrayed in advertising, whether they perceive their role as consumer as declining, whether television advertising reinforced sex roles, and whether the ability to filter out puffery in advertising was negatively related with age. The sample consisted of 317 noninstitutionalized persons, over 55 years of age, who completed a self-administered questionnaire. The results indicated a positive correlation between reliance on mass media advertising for consumer information and age. There was a negative correlation between the elderly's perception of old people and exposure to advertising, suggesting that the elderly are negatively stereotyped in advertising. In addition, advertising exposure was significantly correlated with traditional sex role perceptions. The elderly's perception of consumer role was negatively related to age. Finally, the results indicated that the ability to differentiate between factual claims and evaluative claims diminished with age. (HTH)

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SOCIAL EFFECTS OF MASS MEDIA ADVERTISING ON THE ELDERLY

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SOCIAL EFFECTS OF MASS MEDIA ADVERTISING ON THE ELDERLY

Most research on the consumer behavior among the aged, including the effects of advertising, has been descriptive, focusing mainly on differences in the consumer behavior of the aged vs. younger adults (e.g. Bernhardt and Kinnear 1976). Research focusing on individual differences has been primarily concerned with the information processing capabilities of the elderly (e.g. Phillips and Sternthal 1977) or shopping patterns (e.g. Towle and Martin 1976, Mason and Beardon 1978). The latter type of research "...has been...useful in developing an initial descriptive understanding of the elderly's consumer behavior" (Meadow et al. 1980, p. 745).

Research during the past twenty years has particularly found that (1) the consumer behavior of the aged is different from the consumer behavior of younger people; but (2) there are also significant differences in the consumer behavior among the aged.

Unfortunately, the research has been descriptive, fragmented, and void of analyses based on sound theoretical perspectives (Meadow, Cosmas and Plotkin 1980).

Our research attempts to fill some of the gaps in the study of the consumer behavior of the elderly, especially the social effects of advertising. First, theoretical perspectives related to the behavior of the aged in general and consumer behavior in particular are reviewed. Second, some scattered empirical research in the area is reviewed and interpreted in the context of these theories, providing rationale for the hypotheses. The focus of the hypotheses is on aspects of the consumer behavior of the elderly which may change during the aging process. The study finally presents additional empirical data for the purposes of generating future hypotheses and guiding research in the area.

THEORETICAL PERSPECTIVES

Most explanations of differences in the behavior of the elderly are closely tied to theories of alterations in bio-physical and sociopsychological stages of life-span development. These theories or quasi-theories come from several disciplinary areas, including disengagement, activity, social breakdown, and personality theories, subculturation, and developmental perspectives.

Disengagement Theory. This theory maintains that mutual withdrawal of the elderly and our social system from each other occurs as a natural consequence of aging. As people grow old, the theory contends, there is a voluntary severing of social ties and retreat into isolation. After this inevitable process gradually shifts the relationship between self and society, a new equilibrium emerges that is mutually gratifying to both self and society. It is characterized by constriction of previous interpersonal contacts and increased interiority of the individual (Cumming and Henry 1961).

Three lines of criticism imply that disengagement theory may be incorrect: one, though accepting the theory, questions the theory for all persons; the second does not accept the mutual satisfaction aspect of the theory and does not assume disengagement to be desirable; and the third denies that the theory fits the facts and trends of the social structure (Rose and Peterson 1967).

Activity Theory. This theory, also called engagement theory, holds that the contraction of the aged individual's life space is not voluntary; rather, it is an involuntary exile imposed by society upon the elderly. The aged individual, given a choice, will seek out other activities to substitute for previous role behaviors. If successful substitution is made, the individual's psychological well-being is enhanced (Lemmon et al. 1972). Activity theory, in fact, was espoused

by early gerontologists (Amann, Doberauer, Doberauer, Hoerl, and Majce 1980). Several researchers have suggested that activity theory and disengagement theory are not incompatible; rather they are explanations of different levels of activity or types of adaptation to aging (e.g. Maddox 1964).

Social Breakdown Theory. This theory argues that individuals approaching retirement are confronted with ambiguous roles (e.g. "senior citizen") and tend to assume those behaviors they feel are expected of them (Juypers and Bengtson 1973). Since perceptions of the elderly among other groups are generally negative (Young 1975), the elderly presumably internalize such negative characteristics.

Subculturation. This perspective, first proposed by Rose (1965), views the elderly as a unique and identifiable subculture. Because of common role changes, common generational experiences in a rapidly changing society, and physical limitations, the elderly exhibit a positive affinity for one another (Rose 1965) and constitute a "subsociety," much like the adolescent "subsociety" (Philibert 1965). As a result the aged interact more often with their peers, identifying with the group (Streib 1968) and even exhibiting a structure for attaining status within the group through such factors as good mental and physical health and maintenance of social activity (Rose 1968).

Personality Theory. The main thrust of personality theory is to identify personality characteristics of the individual that predict behavior with age, since the consensus among social gerontologists and personality theorists is that personalities do not change dramatically with age (e.g. Havighurst 1968; Neugarten 1972; Neugarten, Moore and Lowe 1968). Reichard, Livson, and Peterson (1962), for example, identified types of personalities indicative of successful

and unsuccessful aging: mature, rocking chair and armored (successful) and angry and self-hating (unsuccessful).

Developmental Perspectives: Some developmental psychologists and social gerontologists believe that certain aspects of the aging individual's behavior can be explained by biological and physiological factors (e.g. Long, McCrary, and Ackerman 1980; Clark and Anderson 1967). For example, data have supported a reverse horizontal decalage hypothesis - i.e. cognitive skills acquired most recently disappearing first (cf. Long et al. 1980). Similarly, Clark and Anderson (1967) posit a developmental theory of aging involving five adaptive tasks, including redefinition of physical and social life space, substitution of alternative sources of need satisfaction, and reassessment of criteria for evaluation of self. The theory further posits that environmental constraints on life space (e.g. illness, loss of companions) may limit available sources of gratification and force substitution of alternative sources. Environmental forces, motivation and other developmental factors interact with and contribute to the individual's need structure which is likely to affect his behavior (e.g. Pressey and Kuhlen 1957; Kuhlen 1959; Yarrow 1963; Rosow 1970; Erikson 1968; Neugarten 1968; Riley and Foner 1968; Kutner, Fanshell, Togo, and Langner 1970; Barrett 1962).

These theories, arising from different disciplinary areas as they do, are neither comparable nor mutually exclusive; rather, they are tied to different issues which may have impact on the consumer behavior of the elderly. Research data supportive of any of these theories are far from adequate in the area of elderly consumer behavior. Schramm (1969) was among the first to suggest that the elderly use the mass media to help combat disengagement. A media perspective known as activity substitution has emerged from activity theory (Graney and

Graney 1974) although little application of this perspective has been attempted in consumer behavior. La Forge, French, and Crask (1981) tested a personality typology of the elderly (see Reichard, Livson and Peterson 1962) for its utility in market segmentation.

According to Rudinger (1973), the "function of mass media use can possibly promote a new type of social integration." If the elderly person substitutes mass media content for personal communication, s/he should be more likely to learn consumption-related information from those sources with age. A recent series of Nielson studies consistently found television viewing to be the predominant leisure-time activity of older adults, their primary consumption motives being information acquisition, social engagement, and compensation.

Similarly, data reported by Samli and Palunbiskas (1962) and Comstock and other (1978) show that the elderly are heavy users of mass communication. Whether the elderly use the media to help combat social disengagement or as activity substitution, one would expect higher use and reliance on mass media for consumer information and less reliance on social sources with increasing age.

H_1: There is a positive relationship between age and (a) exposure to mass media advertising and (b) reliance on mass media advertising as sources of consumer information among the elderly.

H_2: With increasing age the elderly are less likely to (a) interact with significant others and (b) rely on significant others as sources for consumer information.

Older persons who are relatively isolated may be especially vulnerable to television's influence on aspects of their lives for which traditional roles leave them relatively uninformed, especially if persons cannot test the validity of their perceptions through

interpersonal communication (Comstock et al. 1978). According to Charles Colley (1912), social validation is crucial to the development of an individual's self-esteem. As a major social institution, mass media may represent a significant factor in the formation of many elderly individuals' self perceptions (Kubey 1980). One study found that among heavy television viewers, including those who were elderly, images held of older people were consistently negative (Gerbner et al. 1981). Another study found a negative correlation between amount of exposure to mass media advertising among the elderly and their perceptions of elderly people as being positively portrayed by advertising (Smith, Moschis and Moore 1981).

H_3: Exposure to mass media advertising among the elderly is negatively related to a) self perceptions, b) perceptions of older people in general, and c) perceptions of elderly people as being positively portrayed by advertising.

Social breakdown theory suggests that the aging individual is faced with a "roleless role" upon retirement and is likely to assume the role which s/he perceives is expected of him/her (Young 1979). Ahammer (1969) also notes that the process of aging and retirement can be viewed as socialization into a new role. Whereas most significant life roles (e.g. spouse, parent, employee) have rather clear role norms, role models, and even "rites of passage" (e.g., a wedding), socialization into old age exhibits none of these except, perhaps, the retirement ceremony (Rosow 1980). Role-related aspects of behavior have been found by some researchers to be related to advancing age (Streib 1961, Fulgraff 1978). Neugarten and others (1968) found that "as the individual ages he becomes increasingly aware of age discriminations in adult behavior and of the system of social sanctions that operate with regard to age appropriateness." The "consumer role," one

which changes significantly for (or is even lost by) the aging individual (Mauldin 1976), may be affected by negative prescriptions, leading older consumers to perceive their roles in consumption as declining, as opposed to the developing of the consumer role in childhood and adolescence.

H_4: The perception of decline of their consumer role is positively related to age among the elderly.

Another role-related aspect of the consumer behavior of the elderly which may be negatively affected by exposure to mass media advertising is the perception of sex roles in decision-making. Several researchers have suggested that television commercials reinforce stereotypic sex role expectations (Culley and Bennett, 1976, Dominick and Rauch, 1972); also Frueh (1975) found a relationship between traditional sex role development and amount of time spent watching television.

H_5: Exposure to mass media advertising is positively related to traditional sex role perceptions among the elderly.

Changing patterns of the elderly's shopping behavior and motivations for shopping may be an effort to substitute for previous role behaviors. For example, data reported by Mason and Smith (1974) show that the elderly shop as part of a life style, not just for particular purchases. Similarly, Mason and Beardon (1978) found that elderly shop for a variety of reasons including exercise, leisure and recreation. Increasing isolation from significant others and increasing environmental constraints (e.g. reduced income) and greater focus on self may lead the elderly to evaluate his/her consumption decisions more on economic and less on social bases.

H_6: Economic motivations for consumption are positively related to age among the elderly.

H_7: Social motivations for consumption are negatively related to age among the elderly.

Some changes in the consumer behavior of the elderly may be explained by developmental (biological) factors. The elderly have been reported to process information less efficiently than younger people, requiring more time, slower pacing stimuli, and less distracting influences (Phillips and Sternthal 1977). Such a deficiency in information processing capabilities may explain the elderly's greater susceptability to advertising. The effect of advertising in general has been found to have a significant impact on the consumer behavior of the elderly (French and Crask 1977). One way in which the elderly may be affected by advertising is in terms of their inability to differentiate between what Shimp and Preston (1981) call "evaluative" advertising (puffery) and factual claims. All research in their study implied that evaluative advertising was deceptive.

H_8: Ability to filter puffery is negatively related to age among the elderly.

METHOD

The sample for the study consisted of 317 elderly persons gathered under the auspices of several diverse groups in a major southeastern city. None of the respondents were institutionalized, a common sampling limitation of previous research on elderly consumer behavior noted by Bernhardt and Kinnear (1976).

TABLE 1

	MEAN AGE	MINORITY PRESENTATION		SEX	MEDIAN INCOME	MEDIAN EDUCATION
		Black	Other	% Female		
U.S. Est.*	70.9 years	12.5%	6%	68%	$10,140	7.3 years
Sample	69.9 years	10%	3%	70%	$10,006	12.1 years

*Source: U.S. Bureau of the Census, Current Population Reports, Series P-25, Nos. 311, 519, 614, 643, 704, 807, and 875, in Soldo, Nov. 1980.

Self-administered questionnaires were completed by respondents in late Spring 1981. The self-administration technique may cause some bias toward those respondents who are not perceptually or educationally impaired (e.g., could not hear instructions, could not read questionnaire). This problem is naturally more prevalent in gerontological research than studies of other age groups because of the perceptual declines accompanying advancing age and the lower overall educational level of the elderly as a group (Botwinick 1966). Refusal rates are also a problem in studying elderly individuals. Reichard and others (1962) discuss the problems of sampling the aged: "Indications of depression, apathy, and resignation were frequent among those who refused to participate." Other researchers noted problems with the "suspicious and isolated" who comprised most refusals (Cumming and Henry 1961).

Variables

Each of the main variables was constructed by summing the appropriate items, using item-to-total correlations to purify measures,

and then using Cronbach's alpha to assess the reliability of the scales. All scales had been pretested in previous studies (Moschis and Moore, 1979; Smith et al., 1981). Table 2 shows the operationalization and measurement of each scale. Social class was measured using Duncan's SES scale (1961), and sex was a dichotomous variable (1=male, 2=female).

Aging is, of course, a lifelong process, but for empirical purposes, "the elderly" are defined as persons 55 years of age and older (Neugarten 1968). Research has supported the idea of life span development (Baltes and Labovie 1973) and that change occurs within individuals throughout the life span (Riley and Foner 1968). Neugarten (1968) has found enough differences among the elderly to classify them into the "young-olds" (55-70 years old) and the "old-olds" (over 70 years old).

To measure exposure to and reliance on various information sources for different consumption decisions, a representative produce was selected from each of twelve consumer expenditure categories delineated by the U.S. Department of Labor. To avoid low product salience, the Target Group Index was consulted in each product category for a produc or service used with above average frequency by the elderly.

Items in the puffery filtering scale were suggested by Preston (1975), and those in the sex role perception scale were suggested by Herbst (1952). Separate scales were used to measure self perception and perception of all other elderly because several researchers (e.g. Birren 1964; Bromley, 1966) have found a tendency for some elderly people to deny being old (i.e. "Elderly people are often lonely; however I am not"). For these scales, items suggested by Neugarten and others (1964), Riley and associates (1972), Rosow (1974), and Birren (1964) were used.

RESULTS

Partial correlations were used to evaluate relationships between the dependent and independent variables (Table 3). The data support eight of the twelve hypotheses. The positive correlation between reliance on mass media advertising for consumer information and age ($r=.33$, $p < .001$) supports Hypothesis 1b and suggests that as people grow older, they may rely more on mass media sources of consumer information. Also, as the negative relationship between age and reliance on personal sources of information ($r=-.18$, $p < .001$), supports Hypothesis 2b. Similarly, the negative relationship between exposure to personal sources and age ($r=-.17$, $p < .001$) suggests less interaction with friends and family (Hypothesis 2a). The negative correlation ($r=-.10$, $p < .05$) between advertising exposure and age is significant though not in the hypothesized direction (Hypothesis 1a). This may be because the elderly simply exhibit lower levels of activity in general (Chaffee and Wilson 1975).

There is a negative correlation between the elderly's perception of old people and exposure to advertising ($r=-.10$, $p < .05$). This finding is consistent with findings presented by Gerbner and others (1980) and supports Hypothesis 3b. Advertising exposure is negatively related to perceptions of the elderly as portrayed in advertising ($r=-.10$, $p < .05$), suggesting that the elderly may perceive themselves to be negatively stereotyped in advertising (Hypothesis 3c).

In addition, mass media advertising exposure is significantly correlated with traditional sex role perceptions ($r=.26$, $p < .001$) supporting Hypothesis 5. The hypothesized relationship between exposure to mass media advertising and self perception (Hypothesis 3a) however, was not supported. The elderly's perception of consumer role is negatively related to age ($r=-.13$, $p < .01$) as posited (Hypothesis 4)

The hypotheses regarding motivations for consumption were not supported, (Hypotheses 6 and 7). Although the relationship between economic motivations for consumption and age is significant ($r=-.10$, $p < .05$), the direction of the relationship is negative.

Finally, the results supported Hypothesis 8, since there is a significant negative relationship between ability to filter puffery and age ($r=-.10$, $p < .05$). This indicates that among the elderly, ability to differentiate factual claims and evaluative claims in advertising decreases with age. An interesting finding is that the correlation between ability to filter puffery and age loses significance when the effect of advertising exposure is partialed out. Also, there appears to be a strong negative relationship between ability to filter puffery and exposure to advertising ($r=-.27$, $p < .001$) independent of age. These findings suggest hypotheses which should be tested in future research concerning the effect of exposure to mass media advertising and the elderly's ability to filter puffery.

DISCUSSION

The findings suggest that both age and mass media exposure may affect selected aspects of the consumer behavior of the elderly. Media specialists concerned with acquisition of consumer information by elderly individuals should be interested in the implications that exposure to and reliance on mass media advertising increases with age. Thus, the "old-old" may be more receptive to mass media advertising and less receptive to personal sources of consumer information. To the public policy maker this may suggest that the older consumers are more susceptible to mass media advertising effects.

Advertisers wishing to communicate to the elderly consumer may be interested in the suggestion that advertising exposure may contribute to negative stereotypes of older people among the elderly themselves. This relationship parallels findings relating mass media advertising exposure and negative perceptions of blacks (Culley and Bennett 1976). Our findings also suggest that the elderly feel advertisers do not portray older people in a positive or desirable manner. Certainly advertisers would not wish to alienate such a profitable market segment in such an easily-correctible manner. Although some advertisements are beginning to include older characters, more elderly spokespersons might be used as well. In addition, because the elderly individual may perceive his/her consumer role to decline with age, advertisers should make special efforts to include and appeal to this substantial group of consumers whose special consuming needs are not being met. Their importance as consumers should be reinforced by informative, positive advertising.

Some of the changes in consumer behavior of the elderly seem to be contingent upon developmental changes and some upon interaction with the mass media. Traditional sex role perceptions are positively related to amount of mass media advertising exposure, while they are negatively related to age. Both biologically and psychologically, as men and women age, they become more androgynous. After retirement, males and females have less clearly defined sex roles, sharing household chores and other tasks (Flinch and Hayflick 1977), including decision-making (Neugarten 1968). Our finding that as people age, their sex role perceptions regarding consumption-related decisions become more egalitarian, conforms to such perspectives. This suggests that advertisers may be emphasizing traditional sex role stereotypes of the elderly when, in fact, they should be de-emphasized. Older men

might be portrayed cooking, for instance, and older women making financial decisions in advertisements.

Another finding in line with developmental theory is that aging may be related to decreased ability to differentiate between factual and evaluative advertising. For advertisers this may suggest using more factual advertising claims and less puffery, which may represent irrelevant information to elderly consumers and thus be less efficiently processed. In recent years, much of the controversy over children's vulnerability to advertising has focused on children's cognitive development and apparent lack of cognitive defenses against exaggerated advertising claims. The findings here on the possible effects of advancing age on puffery filtering suggest a similar concern. Bernice Neugarten (1981) predicts that a prominent future concern of public policy makers will be consumer education of the elderly, particularly through the mass media.

Researchers in several areas including mass communication, psychology, sociology, education and political science are concerned with integrating existing gerontological research into theoretical frameworks which would illuminate both variables of critical importance and their linkages. Of those researchers (e.g., Harris and Bodden 1978) who have tested activity theory versus disengagement theory, most seem to support activity theory. Others are beginning to explore the developmental perspective (Papalia 1970, Baltes and Labovie 1973) and personality theory (La Force et al. 1981).

The findings do not appear to support disengagement theory. As can be seen in the correlation matrix (Table 4), age is not related to the way the elderly perceive themselves (r= .06), implying that they do not lose their sense of self-esteem as they grow older. The lack of support of Hypothesis 3a seems to indicate that the elderly do not

have more negative self perceptions with increasing exposure to advertising, although such exposure may increase negative perceptions of older people in general. These findings seem more reasonable in light of activity theory, which holds that the separation of the elderly from society is not voluntary, and suggest that mass media may be a moderating variable in the process. The relationships suggested by social breakdown theory appear to be similar to those suggested by disengagement theory; both explanations may simply involve lower levels of "engagement" (activity).

The finding that puffery filtering is negatively related to age seems reasonable in light of developmental theories which would posit biological changes as a predictor. Substitution of the mass media for lost personal contacts and lack of social validation of media messages may partly explain this effect; however, more research is needed before any causal statements are made.

The findings indicate that the mass media may be a learning agent for elderly consumers. Because the elderly make extensive use of television as an information and entertainment source, the implication is that advertisers are in a position to influence the consumer socialization of the aged. The socialization perspective (Ward 1974, Moschis and Churchill 1978) provides a conceptual framework which accommodates sociological and developmental theories and may provide a fruitful approach to the study of changes in the consumer behavior of the elderly.

Table 2

Description of the Variables

	CONSTRUCT	OPERATIONAL DEFINITION	MEASURE	NUMBER OF ITEMS	RELIABILITY COEFFICIENT ALPHA
1.	Self perceptions	Cognitions held toward self in terms of health, satisfaction with life, and self-importance.	5-point agree-disagree scales. Items such as: "I feel that I am an important member of the community".	4	.74
2.	Perceptions of elderly people	Cognitions held toward elderly people as a group in terms of health, satisfaction with life and importance to society.	5-point agree-disagree scales. Items such as: "People over 65 are usually independent and need no help."	10	.64
3.	Perceptions of the elderly as portrayed by advertising.	Cognitive orientations toward the depiction of elderly people in mass media advertising.	5-point agree-disagree scales. Items such as: "Television advertisements show people over 65 as being unhealthy.	7	.78
4.	Consumer role perceptions.	Orientations toward major aspects of consumption behaviors of elderly people vs. younger people: shopping, spending, saving, information-seeking, and complaining.	5-point agree-disagree scales. Items such as: "People over 65 buy new products as often as people under 55."	12	.52

	CONSTRUCT	OPERATIONAL DEFINITION	MEASURE	NUMBER OF ITEMS	RELIABILITY COEFFICIENT ALPHA
5.	Sex role perceptions.	Cognitive orientations related to the appropriateness of one-spouse domination of certain consuming decisions.	0-to-12 point index of degree of egalitarianism: Items such as: "What car to buy."	12	.96
6.	Puffery Filtering	Ability to differentiate evaluative advertising claims from factual advertising claims.	14-to-42 accuracy index representing the degree of accuracy in judging whether such claims as "you can be sure if it's Westinghouse" are mostly true, untrue, or neither.	14	.84
7.	Economic Motivations	Cognitive orientation related to the importance of product functional and economic features.	0 to 5 point scale measuring degree of importance of knowing specific product information before buying five products. Items included: "guarantees on different brands."	5	.95
8.	Social Motivations	Cognitive orientations related to the importance of conspicuous consumption.	0 to 5 point scale measuring degree of importance of knowing specific product information before buying five products: Items included: "What friends think of different brands of products."	4	.89

	CONSTRUCT	OPERATIONAL DEFINITION	MEASURE	NUMBER OF ITEMS	RELIABILITY COEFFICIENT ALPHA
9.	Exposure to Mass Media Advertising	Self-reported exposure to advertising in television, radio, and newspapers and magazines for 12 products: instant coffee, shoes, car, sofa, homeowner's insurance, wine, hand soap, TV set, laxative, and household batteries.	0 to 36 point index representing positive responses to "often seeing or hearing about" each product in each source.	36	.91
10.	Exposure to Personal sources consumer information.	Self-reported exposure to friends and relatives for consumer information on 12 products.	0 to 24 point index representing positive response to "often hearing, talking about each product."	24	.88
11.	Reliance on Mass Media Advertising	Use of television, radio, and newspaper and magazines for information and advice before buying a new brand of each of 12 products.	0 to 36 point index representing positive responses to reliance on each source for each product.	36	.91
12.	Reliance on personal sources	Use of friends, relatives and salespeople for information and advice before buying a new brand of each of 12 products.	0 to 36 point scale measuring positive responses to reliance on each source for each product.	36	.90

TABLE 3

PARTIAL CORRELATIONS

Independent Variables

Dependent Variables	Age*	Exposure to Mass Media Advertising **
Self perception	-.06(-.05)	-.09(-.08)
Perception of elderly	-.22[a](-.20[a])	-.10[c](-.08)
Perception of elderly in advertising	-.09[c](-.07)	-.10[c](-.08)
Consumer role perceptions	-.13[b](-.12[b])	-.06(-.05)
Sex role perceptions	-.11[c](-.10[c])	.26[a](.27[a])
Puffery filtering	-.10[c](-.08)	-.27[a](-.26[a])
Mass Media advertising exposure	-.10[c](-.06)	1
Personal sources of exposure	-.17[a](-.16)	.24[a](.22[a])
Reliance on mass media advertising	.33[a](.33[a])	.02(.03)
Reliance on personal sources of information	-.18[a](-.17[a])	.38[a](36[a])
Economic motives for consumption	-.10[c](-.04)	.45[a](.43[a])
Social motives for consumption	.04(.07)	.70[a](.63[a])

*Entries in parentheses are correlation controlling for exposure to mass media advertising

**Entries in parentheses are correlations controlling for age

a p .001

b p .01

c p .05

TABLE 4
MEANS, STANDARD DEVIATIONS AND CORRELATIONS OF VARIABLES

	Variable	Mean	SD	Variable 1	2	3	4	5	6	7	8	9	10	11	12	13
1.	Self Perception	16.8	3.5													
2.	Perceptions of the Elderly	20.7	5.7	.20[a]												
3.	Perceptions of Elderly in Advertising	25.1	5.7	.06	-.06											
4.	Consumer Role	22.2	5.3	.22[a]	-.21[a]	.18[a]										
5.	Sex Role Perceptions	4.9	3.7	.11[c]	-.01	.11[c]	-.02									
6.	Puffery Filtering	22.1	7.6	-.15[b]	.10[c]	-.04	.03	-.26[a]								
7.	Economic Motives Consumption	7.3	7.0	.02	.06	.10[c]	.33[a]	.00	-.23[a]							
8.	Social Motives for Consumption	24.1	3.8	-.10[c]	-.20	.10[c]	.10[c]	.23[a]	-.13[b]	.68[a]						
9.	Mass Media Advertising Exposure	6.12	6.0	-.08	-.10[c]	-.10[c]	-.06	.26[a]	-.27[a]	.45[a]	.70[a]					
10.	Personal Sources of exposure	6.0	6.7	.09	-.01	.05	.06	.17[a]	-.21[a]	.28[a]	.29[a]	.24[a]				
11.	Reliance on Mass Media Advertising	8.8	3.8	-.18[a]	-.35[a]	-.14[b]	-.17[b]	.05	.02	.07	.28[a]	.02	-.01			

Variable

	Variable	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13
12.	Reliance on Personal Sources of Information	7.8	6.6	.04	-.01	.10[c]	.03	.35[a]	-.29[c]	.52[a]	.44[1]	.38[a]	-.01	.07		
13.	Age	69.9	6.0	-.06	-.22[a]	-.09[c]	-.13[b]	-.11[c]	-.10[c]	-.10[c]	.04	-.10[c]	-.17[a]	.35[a]	-.18[a]	

a p .001

b p .01

c p .05

REFERENCES

Ahammer, Inge, (1969) "Social Learning Theory as a Framework for the Study of Adult Personality Development," in D.A. Goslin (ed.), Handbook of Socialization Theory and Research, Chicago: Rand McNally and Company, 253-284.

Amann, B. Doberauer, W. Doberauer, J. Hoerl, and G. Majce (1980) "Austria," in Erdman Palmore (ed.), International Handbook on Aging: Contemporary Development and Research, Westport, Conn.: Greenwood Press, 3-38.

Atkin, Charles K. (1976), "Mass Media and the Aging" in H. J. Oyer and E. J. Oyer (eds.), Aging and Communication, Baltimore: University Park Press, 99-118.

Baltes, P. and G. Labovie, (1973) "Adult Development of Intellectual Performance: Description, Explanation and Modification, in D. Eisdorfer and M. Lawton, (eds.), The Psychology of Adult Development and Aging, Washington, D.C., American Psychological Association.

Barrett, J. H. (1972), Gerontological Psychology, Springfield, Ill., Charles C. Thomas.

Bernhardt, K. and T. Kinnear (1976), "Profiling the Senior Citizen Market," in B. Anderson (ed.), Advances in Consumer Research, Vol. 3, Ann Arbor: Association for Consumer Research, 449-452.

Birren, J. E. (1964), The Psychology of Aging, Englewood Cliffs, N.J., Prentice Hall.

Botwinick, Jack (1978), Aging and Behavior: A Comprehensive Integration of Research Findings (2nd edition), New York; Springer.

Bower, R. (1973), Television and the Public, New York: Holt, Rinehart and Winston.

Bromley, D. B. (1966), The Psychology of Human Aging, Baltimore: Penguin Books.

Chaffee, S. and D. Wilson (1975), "Adult Life Cycle Changes in Mass Media Use," presented to the Association for Education in Journalism, Ottawa, Ontario, Canada.

Clark, M. and B. G. Anderson (1967), "Culture and Aging: An Anthropological Study of Older Americans, Springfield, Ill.: Charles C. Thomas.

Comstock, G., S. Chaffee, N. Katzman, M. McCombs, and D. Roberts (1978), Television and Human Behavior, New York: Columbia University Press.

Cooley, C. H. (1912), Social Organization, New York: Scribners.

Culley, J. and R. Bennett (1976), "Selling Women, Selling Blacks," Journal of Communication, 26(4), 160-174.

Cumming, Elaine and W. Henry (1961), Growing Old: The Process of Disengagement, New York: Basic Books.

Dominick, J. and G. Rauch (1972), "The Image of Women in Network Television Commercials," Journal of Broadcasting, 16(3), 259-265.

Duncan, Otis, D. (1961), "A Socioeconomic Index for All Occupations," in Albert P. Reiss, Jr. (ed.), Occupations and Social Status, New York: Free Press.

Erikson, E. H. (1968), Identity, Youth and Crisis, New York: Norton.

Finch C. and L. Hayflick (eds.), (1977), Handbook of the Biology of Aging, New York: Van Nostrand.

Fox, J. A. (1980), "Consumer Protection and the Elderly," in Consumer Education Resource Network, The Elderly Consumer, Rosslyn, VA.

French, W. A. and M. R. Crask (1977). The Credibility of Media Advertising for the Elderly, in B. A. Greenberg and D. N. Bellenger (eds.), AMA Educators' Conference Proceedings, Chicago: American Marketing Association, 1977, 74-77.

Frueh, M. and P. McGhee (1975), "Traditional Sex Role Development and Amount of Time Spent Watching Television," Developmental Psychology, Vol. 11 (1) November, 109.

Fulgraff, B. (1978), "Social Gerontology in West Germany: A Review of Recent and Current Research," Gerontologist, 18 (1), 42-58.

Gerbner, G., L. Gross, N. Signorielli, and M. Morgan (1980). "Aging with Television: Images on Television Drama and Conceptions of Social Reality," Journal of Communication, 30, 37-47.

Goldstein, S. (1968), The Aged Segment of the Market, 1950 and 1960", Journal of Marketing, 32, 62-68.

Goldstein, S. (1965), "Changing Income and Consumption Patterns of the Aged, 1950-1960," Journal of Gerontology, 20, 455-461.

Graney, M. and E. Graney (1975), "Communications Activity Substitutions in Aging," Journal of Communication, 24, pp. 88-96.

Harris, H. E. and J. L. Bodden (1978), "An Activity Group Experience for Disengaged Elderly Persons," Journal of Consulting Psychology, 24 (4), 325-30.

Havighurst, Robert (1968), "A Social-Psychological Perspective on Aging," Gerontologist, 8 (2), 67-71.

Herbst, P. G. (1952), "The Measurement of Family Relationships," Human Relations, (5), 3-35.

Hess, B. (1975), "Stereotypes of the Aged," Journal of Communication, 24, 76-85.

Kubey, R. W. (1980), "Television and Aging: Past, Present and Future," Gerontologist, 20, 16-35.

Kuhlen, R. G. (1959), "Aging and Life - Adjustment," in J. E. Birren (ed.) Handbook of Aging and the Individual, Chicago: University of Chicago Press, 852-897.

Kutner, B., D. Fanshell, A. M. Togo, and T. S. Langner "Factors Related to Adjustment in Old Age," R. S. Kuhlen and J. C. Thompson (eds.), Psychological Studies of Human Development, New York: Appleton - Century - Crofts, 583-595.

Kuypers, J. and V. Bengston (1973), "Social Behavior and Competence: A Mode of Normal Aging," Human Development, 3, 181-201.

La Forge, M., W. French, and M. Crask (1981), "Segmenting the Elderly Market," Paper presented to the AIDS Conference, Boston, Mass., November.

Lemmon, Bruce W., Vern Bengson, and James Peterson (1972), "An Exploration of the Activity Theory of Aging: Activity Types and Life Satisfaction Among In-Movers to a Retirement Community," Journal of Gerontology, 27, (4), 511-523.

Long, H., K. McCrary and S. Ackerman, "Adult Cognitive Development: A New Look at Piagetian Theory," Journal of Research and Development in Education, Vol. 13 (3), 11-20.

Maddox, G. L., Jr. (1964), "Disengagement Theories: A Critical Evaluation," The Gerontologist, 4, 80-82, 103.

Mason, J. B. and W. O. Bearden (1978), "Profiling the Shopping Behavior of Elderly Consumers," The Gerontologist, 18, 454-461.

Mason, J. B. and B. E. Smith (1974), "An Exploratory Note on the Shopping Behavior of the Low Income Senior Citizen," Journal of Consumer Affairs, 8, 204-210.

Mauldin, C. (1976), "Communication and the Aging Consumer," in H. J. Oyer and E. J. Oyer (eds.), Aging and Communication, Baltimore: University Park Press.

Meadow, H. L., S. Cosmas, and A. Plotkin (1980), "The Elderly Consumers: Past, Present, and Future", In K. Monroe (ed.), Advances in Consumer Research, Vol. 8, Association for Consumer Research, 742-747.

Moschis, George, and Gilbert A. Churchill, Jr. (1978), "Consumer Socialization: A Theoretical and Empirical Analysis," Journal of Marketing Research, 15 (November, 599-611.

_____ and R. L. Moore (1979), "Decision Making Among the Young: A Socialization Perspective," Journal of Consumer Research, 6 (September), 101-112.

Neugarten, B. (1981), "Social Policy on Aging: Agenda for the 1980's", Speech presented at Georgia State University, Atlanta, GA, April 16.

Neugarten, B. (1972), "Personality and the Aging Process," Gerontologist, 1, 9-15.

Neugarten, B. and D. Havighurst (1976), "Aging and the Future," in B. Neugarten and D. Havighurst (eds.) Social Policy, Social Ethics and the Aging Society, National Science Foundation.

Neugarten, Bernice, Joan Moore, and John Lowe (1968), "Age Norms, Age Constraints, and Adult Socialization", in Neugarten, B. (ed.), Middle Age and Aging, Chicago, Ill: University of Chicago Press.

Neugarten, B., R. Havighurst, and S. Tobin (1968), "Personality and Patterns of Aging," in B. Neugarten (ed.), Middle Age and Aging, Chicago: University of Chicago Press.

P
Papalia, D. E. (1972), "The Status of Several Conservation Abilities Across the Life Span", Human Development, 15, 229-245.

Philibert, N. (1965), "The Emergence of Social Gerontology," Journal of Social Issues, Vol. 21 (4), 4-12.

Phillips, L. and B. Sternthal (1977), "Age Differences in Information Processing: A Perspective on the Aged Consumer," Journal of Marketing Research, 14 (November), 444-457.

Pressey, S. L. and R. G. Kuhlen (1957), Psychological Development Through the Life Span, New York: Harper and Row.

Preston, Ivan (1975). The Great American Blow-Up: Puffery in Advertising and Selling, Madison, WI: The University of Wisconsin Press.

Reichard, S., F. Livson, and P. Peterson (1962), Aging and Personality, New York: John Wiley.

Riley, M. W., and A. Foner (1968) (eds.), Aging and Society, Vol. 1: An Inventory of Research Findings, New York: Russell Sage.

Riley, N. W., Anne Foner, Beth Hess, and Marcia L. Toby (1969), "Socialization for the Middle and Later Years," in Handbook of Socialization Theory and Research, D. A. Goslin (ed.), Chicago: Rand McNally & Co., 951-981.

Rose, Arnold M. (1965), "Group Consciousness Among the Aging", in A. M. Rose and W. A. Peterson (eds.), Older People and Their Social World, Philadelphia: Davis.

Rosow, I. (1970), "Old People: Their Friends and Neighbors," American Behavioral Scientists, 14, 59-69.

Rosow, I. (1967), Social Integration of the Aged, New York: The Free Press.

Rosow, Irving, "The Social Context of the Aging Self," The Gerontologist, 13, 82-87.

Rosow, I. (1975), Socialization to Old Age, Berkeley, CA: University of California Press.

Rudinger, G. in Palmore, Erdman (ed.), (1980), International Handbook on Aging: Contemporary Developments and Research, Greenwood Press: Westport, Conn.

Samli, A., and F. Palunbiskas (1972), "Some Lesser Known Aspects of the Senior Citizen Market - A California Study," Akron Business Review, 3, 47-55.

Schiffman, L. (1972), "Perceived Risk in New Product Trial by Elderly Consumers," Journal of Marketing Research, Vol. 9, pp. 106-108.

Schramm W. (1969), "Aging and Mass Communication," J. Riley and M. Johnson (eds.), in Aging and Society, Vol. 2, Aging and the Professions, New York: Russell Sage.

Shimp, T. and Preston, I. (1981), "Deceptive and Nondeceptive Consequences of Evaluative Advertising," Journal of Marketing, 45 (Winter) pp. 22-32.

Smith, R. B., G. P. Moschis, and R. L. Moore (1981), "The Impact of Mass Communication on Consumer Decision Making Among the Elderly," presented to the Association for Education in Journalism Annual Convention, Mass Communication and Society Division, East Lansing, Mich.

Streib, Gordon (1968), "Are the Aged a Minority Group?" in B. Neugarten (ed.), Middle Age and Aging, Chicago, Ill: University of Chicago Press.

Towle, J. G. and C. R. Martin (1976), "The Elderly Consumer: One Segment or Many?" in B. B. Anderson (ed.), Advances in Consumer Research, Vol. 3, Association for Consumer Research, 463-468.

Ward, Scott (1974), "Consumer Socialization," Journal of Consumer Research, 2, 1-16.

Waddell, Fred E. (1976), The Elderly Consumer, Columbia, MD: The Human Ecology Center, Antioch College.

Yarrow, M. R. (1963), "Appraising Environment", in R. H. Williams, C. Tibbitts, and W. Donahue (eds.), Processes of Aging, Vol. 1: Social Psychological Perspectives, New York: Alding, 201-222.

Young, T. H. (1979), "Use of the Media by Older Adults," American Behavioral Scientist, 23, (1), 119-136.

_____(1975), "An Image Analysis of the Stimulus Concepts 'Senior Citizen' and You When You Are a Senior Citizen," presented to the International Communication Association, Portland, Ore.